

CLAIMS

[1] A coating material for forming a coating layer on a surface of a transparent film, the coating material comprising:

5 a thermosetting resin;
 an inorganic filler; and
 a mixed solvent that contains at least two solvents,
 wherein a content of the thermosetting resin is in a range from 5 to
 20 wt% with respect to a total amount of the thermosetting resin and the
10 inorganic filler, and

 the mixed solvent contains cyclohexanone so that a content of the
 cyclohexanone is in a range from 25 to 35 wt% with respect to the entire
 mixed solvent.

15 [2] The coating material according to claim 1, wherein the thermosetting
 resin comprises a siloxane-based resin.

[3] The coating material according to claim 1, wherein the thermosetting
 resin comprises alkoxy silane.

20 [4] The coating material according to claim 1, wherein a total content of
 the thermosetting resin and the inorganic filler is 1 to 2 wt% with respect to a
 total amount of the thermosetting resin, the inorganic filler, and the mixed
 solvent.

[5] The coating material according to claim 1, wherein the inorganic filler
 comprises at least one of metal fine particles and metal oxide fine particles.

25 [6] The coating material according to claim 1, wherein the transparent
 film is a protective film of a polarizing plate.

[7] The coating material according to claim 1, wherein the transparent
 film is a triacetylcellulose (TAC) film.

30 [8] The coating material according to claim 7, wherein the
 triacetylcellulose (TAC) film is a triacetylcellulose (TAC) film that is not
 saponified.

[9] A method for manufacturing an optical film that comprises a transparent film and a coating layer formed on a surface of the transparent film, the method comprising:

coating the surface of the transparent film with the coating material
5 according to claim 1 to form a coating; and
heat-treating the coating to obtain the coating layer.

[10] The method according to claim 9, wherein the coating layer has a thickness in a range from 50 to 500 nm.

[11] The method according to claim 9, wherein the transparent film is a
10 triacetylcellulose (TAC) film.

[12] The method according to claim 11, wherein the triacetylcellulose
(TAC) film is a triacetylcellulose (TAC) film that is not saponified.

[13] The method according to claim 9, further comprising forming a hard
coat layer on a surface of the coating layer.

15 [14] The method according to claim 13, further comprising forming a coat
layer having a lower refractive index than the hard coat layer on a surface of
the hard coat layer.

[15] An optical film comprising:

a transparent film; and
20 a coating layer formed on a surface of the transparent film,
wherein the optical film is obtained by the method according to claim
9.

25 [16] The optical film according to claim 15, wherein a hard coat layer is
formed on a surface of the coating layer, and a coat layer having a lower
refractive index than the hard coat layer is formed on a surface of the hard
coat layer.

[17] The optical film according to claim 16, which is used as an
antireflection film.

30 [18] The optical film according to claim 15, which is used as a protective
film for protecting a polarizing film.

- [19] A polarizing plate comprising a polarizing film and a protective film arranged on at least one surface of the polarizing film,
 - wherein the protective film is the optical film according to claim 15.
- [20] An image display apparatus comprising at least one of the optical film
 - according to any one of claims 15 to 18 and the polarizing plate according to claim 19.